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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/631,995 | 07/31/2003 | Michael J. Lyden | 279.056US4 | 2198 |
| 21186 | 7590 | 11/16/2006 | EXAMINER | |
| SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402 | | | EVANISKO, GEORGE ROBERT | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3762 | |

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

NT

Office Action Summary

Application No.

10/631,995

Applicant(s)

LYDEN, MICHAEL

Examiner

George R. Evanisko

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3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-9 and 26-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 26-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>12/16/05, 7/31/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of the restriction in the reply filed on 10/26/06 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 4, 5, 7, 8, 27, 28, and 30-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2 and 8, the claims are vague since they are not stating what element is doing the correlating. In addition, it is unclear if the claims are reciting the "charge depletion vs... model" or are functionally reciting the elements. In addition, one of claims 2 or 8 should be canceled since they are duplicates of each other.

In claim 4, the phrase "wherein a pacing supply storage...capacitor" seems to be misplaced. It is unclear what element the Vcs relates to or if this is a function of some element.

In claim 5, "a capacitor voltage level (Vsc) is vague since claim 4 calls Vsc the pacing supply storage voltage; "the battery power terminal" lacks antecedent basis; and "a time charge measurement count" makes the claim incomplete since the system has not set forth the use of or element for a measurement count.

In claim 7, “wherein a device operating current range...” is vague and it is unclear if the claim is setting forth the device range and what element is doing this function. It is unclear what the claim is accomplishing.

In claim 27, “a switch” is inferentially included and it is unclear if the applicant is positively reciting the switch or functionally reciting the switch.

In claim 30, “the discharge switch” lacks antecedent basis.

In claim 32, “wherein a storage voltage” is vague and seems to be misplaced. In addition, “the time measurement” lacks antecedent basis and the claim has not set forth an element to have a time measurement.

In claim 33, “the pacemaker control circuitry” lacks antecedent basis and “a time charge measurement” is vague and makes the claim incomplete for not setting forth an element to make the measurement.

In claim 36, “the time measurement” makes the claim incomplete, “the discharge switch” lacks antecedent basis, “a time charge measurement count” makes the claim incomplete, and “a bypass switch” is inferentially included.

Claim Rejections - 35 USC § 102/103

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 6, and 9 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kroll (5741307).

Kroll discloses SVO battery, 10 (which is a lithium battery), capacitor, 18, first device, e.g. 12, 42, 20, 44, etc, and second device, 32. The second device has predetermined set up parameters such as frequency of charge times to be evaluated (col 6, line 45), complete discharge of capacitor or partial discharge of capacitor with corrected charge time (col 8, lines 5-15), and/or full charge of capacitor to make the measurements (col 7, line 63). Also, it is inherent that the system have VI and VF set up parameter since the system must know at what voltage to start charging the capacitor and at what voltage to end the charging of capacitor. In addition, second device uses the maximum permissible charge time (col 6, line 44) as the ERT, determines a rate of charge storage to compare to the ERT, and declares the ERT based on a number of comparisons (such as 1 or 2 comparisons, col 13). The period at which the charge measurements are occurring is considered to be a relatively quiescent period since the system is not delivering defibrillation at that point.

In the alternative, Kroll discloses the claimed invention except for the charge time set up parameters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate in the charging system and method as taught by Kroll, the charge time set up parameters, such as VI and VF, since it was well known in the art that charging systems and methods use charge time set up parameters, such as VI and VF, so that the system knows at what voltage to start the charging of the capacitor and at what voltage to stop the charging of the capacitor so the capacitor can be charged to be tested/used.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kroll as applied to claim 1 above.

Kroll discloses the claimed invention except for the rate of charge storage being correlated to a value of internal battery resistance through a charge depletion vs. battery resistance mathematical model. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the charging system and method as taught by Kroll, with the rate of charge storage being correlated to a value of internal battery resistance through a charge depletion vs. battery resistance mathematical model since it was known in the art that charging systems and methods use the rate of charge storage being correlated to a value of internal battery resistance through a charge depletion vs. battery resistance mathematical model to provide the patient/physician with a calculation of approximate times when it can be expected that the battery is depleted and/or to allow the use of lookup tables or a quick calculation to determine the battery resistance to minimize processing power and time.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

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ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6, 8, 9, and 26-36 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6654640. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims are narrower and meet the limitations of the broader application claims. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include in the patented claims a lithium battery, a charge depletion vs battery resistance mathematical model, determining the rate of charge storage during a quiescent period, and using V_F compared to V_{sc} to start the time measurements since it was known in the electronic arts that: a lithium battery is used because it provides high power in a small package; a charge depletion vs battery resistance mathematical model is used to allow the use of lookup tables or a quick calculation to determine the battery resistance; determining the rate of charge storage during a quiescent period is used so that other electrical functions do not interfere with the measurements and test; and V_F is compared to V_{sc} to start the time measurements to allow the system to determine that a full charge is not on the capacitor to start the tests.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Evanisko whose telephone number is 571 272 4945. The examiner can normally be reached on M-F 6:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571 272 4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


George R Evanisko
Primary Examiner
Art Unit 3762

11/13/06

GRE
November 13, 2006